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Getting children back to nature

"To know this world is to gain a proprietary attachment to it. To know it well is to love and take responsibility for it."

Edward O. Wilson
The Future of Life, 2002

You may not realize it, but the future of Utah's wildlife and the state's wild places is in your hands. Especially if you're a parent, a teacher or an adult who is in a position to influence young people.

Please read on to find out why and how you can make a difference.

Plugged in: but not to nature

Research has shown that there is a disconnect between today's children and their natural world. A growing body of evidence is helping us understand how this lack of connection is going to affect our natural world.

Much of this evidence is found in Richard Louv's groundbreaking 2005 book *Last Child in the Woods: Saving our Children From Nature-Deficit Disorder*.

Including both research and anecdotal evidence collected over a 10-year period, Louv discusses the role nature plays in the health and development of our children. He also writes about the concern these children may, or may not have, about the continuing loss of our planet's natural resources.

According to a 2002 *Journal of Science* survey, it's easier for the average eight-year-old to identify the cartoon characters in the electronic game *Pokemon* than the beetles and oak trees in his or her community. A fourth grader's quote in a recent survey, "I like to play indoors better 'cause that's where all the electrical outlets are," is not especially surprising.

Our changing connection to nature

As humanity evolved over the past 120,000 or more years, people roamed across savannahs and lived in forests. They lived in intimate contact with nature. As humans cultivated plants and domesticated animals, permanent settlements arose, but people still remained close to nature. Children lived in places that were surrounded by fields, farms and the edges of wilder environments.

Even as late as the early 1970s, when most people lived in cities, children could still freely explore isolated woodland plots, abandoned fields and neighborhood parks.

Today, children in many Western countries have limited freedom to explore natural areas. By the early 1990s, the radius where children were allowed to roam around their homes had shrunk to a ninth of what it was in 1970. Some of the trends that have increased the gap between children and nature include fears about traffic, strangers and virus-carrying mosquitoes; decreasing green spaces and access to them; and television, computers and technology-based education.

Virtual experiences through electronic media have started to replace the "real" experiences children used to have. These virtual experiences are making children think nature is exotic and far away, in places they'll never experience. They're losing the understanding that nature exists in their own backyards and in their own neighborhoods.

Children are spending more of their free time indoors. In a recent study, about 60 percent of children surveyed said they had seen more animals on television and in the movies than they had in the wild. Only 40 percent of children living in rural areas said they had ever spent more than 30 minutes in a wild place, and less than 20 percent of the children living in urban areas had ever seen wildlife in a natural setting.

In his 2002 book *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*, Stephen Kellert writes that society has become "so estranged from its natural origins it has failed to recognize our species' basic dependence on nature as a condition of growth and development."

A lack of time in the outdoors also decreases children's knowledge of and appreciation for their natural world. That lack of knowledge and appreciation tends to breed apathy towards environmental concerns.

Mother nature: not just an old pagan proverb

Louv's highlights from the fields of psychology, education and other

disciplines reveals strong correlations between exposure to nature and improved childhood development. This exposure to nature nurtures children as they grow.

Research has shown that the natural environment has profound effects on the health and development of children. The findings have shown that time spent in natural environments inspires creativity, imagination and powers of observation; buffers stress and helps children deal better with adversity; improves concentration and self-discipline; boosts motor fitness and health; stimulates positive social behavior and interaction between children; enhances learning development, improving awareness, reasoning and observational skills; promotes humility, connection with nature and a sense of place; and helps children with Attention Deficit Hyperactivity Disorder concentrate better.

Growing green kids

As children continue to become disconnected with nature, they aren't the only ones who will lose. This disconnect is also setting the stage for a continual loss of the natural environment upon which all of us depend. "People who care, conserve; people who don't know, don't care. What is the extinction of the condor to a child who has never seen a wren?" Robert Pyle writes in his 1993 book *The Thunder Trees: Lessons from an Urban Wildland*.

Research has clearly shown that a child's love of nature, along with a positive environmental ethic, grows out of regular contact with their natural world. In one survey, adults were asked what inspired them to care about the environment and at what time in their lives that inspiration occurred. Most of the adults interviewed said the time they spent as a child in natural places, and family members who helped them understand the value of the environment, were the main reasons they grew up caring about nature.

With the current trends in society, the last chance to connect our children with their natural world, and create a future generation that values and preserves it, is rapidly slipping away.

What nature does for people

Many adults understand the emotional and social reasons why people need to experience wildlife and nature from time to time. They recognize the role nature plays in recharging our batteries.

For some, simply taking a walk in a park or setting up a backyard bird feeder meets their needs for nature. Others seek out more active pastimes, such as hiking, hunting, canoeing or photographing wildlife.

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In addition, adults are starting to appreciate how wild creatures and places are more than a source of personal pleasure and recuperation. For example, people are starting to understand that the health of wildlife is an excellent indication of the health of the environment on which all of us depend. We're also starting to understand that healthy wildlife populations and habitat are important to our social and economic well-being. We're starting to reflect on the role wildlife has played in the cultural and spiritual aspects of our lives; how wildlife has inspired various human endeavors in art, music, dance, drama and literature. Economists are starting to calculate the billions of dollars wildlife and nature tourism contribute to our national economy every year.

Beyond the social and economic benefits, wildlife and wild habitats play a vital role in the ecological and biological processes that are essential to life itself. The functioning of the biosphere, including the maintenance and enhancement of human life, depends on countless interactions among plants, animals and microorganisms.

Wild species play a key role in several biological processes. Some of these processes include pollinization, seed dispersal, germination, soil generation, nutrient cycling, predation, waste breakdown, degradation and removal of pollutants, and pest control. These processes are essential for agriculture, forestry, fisheries and other endeavors that are necessary for human life.

Sustaining biological diversity is also important if we want to preserve

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Opportunities for children to explore natural areas are diminishing.

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Nature can play a substantial role in recharging our children's batteries.

the genetic diversity needed to maintain stocks that are adapted to local or regional conditions and that can withstand pests, diseases, predators, pollutants and other threats. Medicine and the development of new drugs and treatments also depend greatly on wild animals and plants.

No child left inside

When you consider the need to sustain the Earth's biological diversity, you can see that healing the broken bonds between children and nature is in our best interest.

There are many ways to accomplish this goal. One way is for parents to get their family out-of-doors and into their natural environment more often. In her 2006 book *It's a Jungle Up There*, Margaret Lowman advocates nature-based immersion for the entire family—not just children—as a way to foster a family conservation ethic.

In response to concerns about the spread of nature-deficit disorder, more and more resources and programs are sprouting up to help. For example, various Watchable Wildlife events sponsored by the Division of Wildlife Resources provide great opportunities for families to get out and appreciate wildlife. Information about these wildlife-viewing events is available at *wildlife.utah.gov/watchable-wildlife*.

WILD and natural

If you're an educator, many excellent programs are available to you. These programs include Project WILD and Project Learning Tree. Both of these programs offer resources and materials that will help you educate your school children about natural environments and the wild species they support.

A new "Flying WILD" program, which focuses on bird education and conservation, will soon be available to Utah educators through the Division of Wildlife Resources.

You can also get students involved in nature by helping them transform a part of their schoolyard from a barren area of grass, asphalt and manmade equipment into a more natural environment. This type of environment gives children a place to explore and play, and supports classroom learning.

You can turn part of your schoolyards into a mini-wildlife habitat, pond, stream or butterfly garden that can be used for place-based and project-based education. These mini-wildlife habitats promote experiential learning through discovery and hands-on experiences with nature.

Research on naturalized schoolyards has shown that these areas have a positive effect on the development of children's environmental stewardship values. The research has also shown that the more diverse these natural landscapes are, the greater a child's appreciation will be of nature and his or her experiences in it.

A combination of formal learning and informal, positive experiences in naturalized environments is closely associated with the development of a child's responsible behaviors. A national report presented by Leiberman and Hoody in 1998, titled *Closing the Achievement Gap*, shares the results of a study of 40 schools. These schools used the natural environment as an integrating context for learning by incorporating problem-solving and project-based activities.

The benefits the researchers observed included better performance on standardized measures of academic achievement in reading, writing, math, science and social studies; reduced discipline and classroom management problems; increased student engagement and enthusiasm for learning; and greater pride and ownership in their accomplishments.

Project WILD in Utah offers small grants that allow educators to initiate schoolyard NatureScapes at their schools.

If we provide today's youth with more opportunities to explore, discover and learn in natural environments, children and society as a whole will benefit. The evidence seems to indicate that this will help future generations possess the environmental values needed to become stewards of the Earth and its diversity of nature.

Getting WILD! Utah's WILD Notebook is produced by Utah's Project WILD program. WILD workshops, offered by the Division of Wildlife Resources, provide teachers and other educators with opportunities for professional development and a wealth of wildlife education activities and materials to help students learn about wildlife and its conservation. For a current listing of Project WILD educator workshops, visit the Project WILD Web site at *wildlife.utah.gov/projectwild* or e-mail Diana Vos at *dianavos@utah.gov*.